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# **1. INTRODUCTION**

## **PURPOSE OF REPORT**

*Geographic Variations in Practitioner Expenditures and Utilization* was developed to explore issues of demand for and access to health care among Maryland's residents, and to gain a better understanding of residents' travel patterns to obtain care. Because other studies have shown rural residents to have a higher incidence of chronic disease compared to urban residents, it is important to know whether and how health care utilization differs among Maryland's rural and urban residents. Knowledge of travel patterns for health care services is fundamental to the identification of geographic market areas for health care services. Market areas for health care services likely differ depending on whether the services are for primary care or for tertiary care (i.e., hospital inpatient treatment).

This report analyzes differences in health care practitioner<sup>1</sup> utilization and expenditures by urban and rural residents of Maryland (Chapter 2). Chapter 3 assesses urban and rural residents' use of practitioner services outside their jurisdiction of residence, expanding on the geographic analysis contained in the Commission's March 1999 report, *Practitioner Expenditures and Utilization: Experience from 1997*, which compared in and out of state use of practitioner services by type of insurer. This chapter also examines the extent of border crossing in and out of Maryland for hospital inpatient services. Data limitations require the inpatient analysis to focus on the Medicare population, but a subset of the Medicare population that best reflects travel patterns for inpatient services in the privately insured is also examined. Information contained in this report is based on data from calendar year 1997.

Chapter 2 discusses variations in the cost and mix of services for residents insured by private and government payers and compares how use of practitioner specialties differs for urban and rural residents. Chapter 3 addresses the need/willingness of urban and rural residents to travel for practitioner services and considers factors – such as location of employment and the availability of physician specialties – that may influence travel patterns. Chapter 3 also examines what proportion of resident's inpatient hospital discharges and reimbursements occur outside of Maryland. Data limitations require the inpatient analysis to focus on the Medicare population, but a subset of the Medicare population that best reflects travel patterns for inpatient services in the privately insured is also examined. To consolidate the information in the chapters, any conclusions that might be drawn from the data analysis are presented with the analytical results rather than being deferred to a separate conclusion section. And, in lieu of chapter summaries we have elected to highlight the major results of these studies in section previews that precede each analytical segment.

## **SOURCES OF INFORMATION**

The Maryland Medical Care Data Base (MCDB) is the primary source for most of the information presented in this report. Data for services provided in 1997 were obtained from payers in accordance with COMAR 10.25.06 and consistent with state law. The quality and completeness of data submissions varied greatly even among the large payers, forcing the Commission to limit the number of payers used in the analyses. Analyses presented in this report are based on submissions from 44 of the largest payers, who constitute about 91 percent of the state's premium volume.

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<sup>1</sup> Health care practitioners refers to both physicians and non-physician health care professionals.

The Health Care Financing Administration (HCFA) and the Department of Health and Mental Hygiene (DHMH) provided FFS practitioner data on Medicare and Medicaid under provisions of federal and state law which allows the release of information to qualified research organizations within state government. ***HCACC obtained all data from government and private contributors in a manner designed not to identify individual patients.*** HCFA also supplied the Medicare Provider Analysis and Review (MEDPAR) file for 1997, which contains information for 100 percent of Medicare beneficiaries using hospital inpatient services. These records are stripped of data elements that would permit identification of beneficiaries.

## ***LIMITATIONS IN THE ANALYSES***

There are several important limitations relating to the data collection sources and their collection methods that need to be recognized in examining these analyses.

***The transition to HealthChoice, the HCFA 1115 Waiver Program that enrolled many Medicaid recipients in mandatory managed care, as well as other related program changes, has significantly reduced the completeness of the Medicaid information that the Commission presents in this report.*** The Commission only includes fee-for-service (FFS) data from the Medicaid Program in the MCDB. Enrollment in managed care organizations (MCOs) began in July 1997 and by the end of the year about two-thirds of the Medicaid population was in the program. From July to December 1997, as increasing numbers of Medicaid beneficiaries moved into capitated plans, their service utilization was no longer captured in the MCDB. Also, due to complications associated with initiating and structuring this new payment system, none of the mental health services paid for by Maryland Health Partners in the second half of 1997 were incorporated in the Maryland Medicaid Information System (MMIS) at the time HCACC's Medicaid file was constructed.

***Information presented in this report is based on services reimbursed by third-party payers and does not include uninsured services.*** Uninsured services include services provided to individuals without insurance coverage as well as uncovered services for insured individuals. Uninsured services for health care practitioner services accounted for 14 percent of Maryland's total expenditures on health care practitioner services in 1997.<sup>2</sup> It is likely that the distribution for uninsured services is significantly different from the distribution for covered health care services discussed in this report.

Unless otherwise noted, payments are based on the total of patient and payer expenditures for a given service. ***Payments made by secondary payers are not included because those expenditures are assumed to be the patient's responsibility and appear as patient coinsurance and deductibles of the primary payer.*** Eliminating claims on secondary payments resolves the double counting of services that will exist if these payments are counted.

***The scope of data examined from HMOs and non-HMOs differs because the analyses are limited to services reimbursed under FFS.*** Because HMOs use FFS and capitated payment to reimburse providers, not all services obtained by HMO patients are reflected in these analyses. The absence of information on these capitated services makes comparisons between non-HMOs and HMOs in the mix of services by practitioners somewhat difficult. The average number of services and average

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<sup>2</sup> Maryland Health Care Cost and Access Commission, *State Health Care Expenditures: Experience from 1997*, December 1998, p. 26.

total payment per HMO patient cited here understate the true utilization by HMO enrollees due to the absence of capitated services and payments.

***The inability of some payers to accurately report practitioner specialty means that conclusions about distribution of services and payments must be qualified.*** Accurate practitioner specialty information is critical for constructing the analyses on proportion of payments and services among different categories of practitioners. Analyses using specialty are restricted to the subset of payers that provided this information, although the information may not always be accurate.

***Provider addresses are not always a reliable indicator of where the service was actually performed.*** For certain analyses, the patient's county of residence is compared to the provider's county as reflected by the health care provider's address. Some providers may be using the address of a billing office or main office on the claim form, even when the service is performed at a different location. Claims lacking information on patient location were excluded from all analyses, while those missing practitioner location were excluded if the specific analysis required that information.

